

Spy Pond Edge Protection and Erosion Control Project
Estimate of Probable Cost

Phase: Final Design
 Prepared for: Town of Arlington
 Prepared by: Hatch
 Last Updated: 4/4/2018

Project Area Summary

Project Area	
General Conditions	\$70,610
Area 1: Spy Pond Park	\$109,907
Area 2: Scannell Field	\$174,533
Area 3: Boy and Girls Club	\$60,551
Area 4: Spring Valley	\$26,811
BASE BID TOTAL (w/ contingency)	\$442,412

General Conditions

Specification Section		Work Item	Quantity	Unit	Unit Cost	Total Cost
Mobilization	1505.1	Mobilization	1.0	LS	\$20	\$20,000
		Mobilization Sub Total				\$20,000
Erosion Control	1568.1	Turbidity Curtain	1	LS	\$10,000	\$10,000
Traffic & Ped. Management	1570.1	Traffic and Pedestrian Management	1	LS	\$5,000	\$5,000
Site Preparation	2100.1	6' Ht. Temporary Chain Link Construction Fence	200	LF	\$15	\$3,000
		TM Sub Total				\$18,000
Landscape Mgmt	2955	Landscape Warranty (3 year)	1	LS	\$23,400	\$23,400
		Landscape Management Sub Total				\$23,400
					Sub Total	\$61,400
					Contingency (15%)	\$9,210
					General Conditions Total	\$70,610

Area 1: Spy Pond Park

Specification Section		Work Item	Quantity	Unit	Unit Cost	Total Cost
Site Preparation	2101.1	4' Ht. Protection Fence (sedge)	500	LF	\$7	\$3,500
	2101.2	Selective Invasive Species Removal	0.5	PER DAY	\$2,600	\$1,300
	2101.3	Tree Pruning	0.5	PER DAY	\$1,800	\$900
	2101.4	Remove and Dispose Rip Rap	10	CY	\$25	\$250
	2101.5	Remove and Stockpile Cobblestone Edge	35	LF	\$35	\$1,225
	2101.6	Remove and Stockpile Boulders	5	CY	\$75	\$375
	2101.7	Remove and Dispose of Stabilized Aggregate Path	9	CY	\$20	\$270
		Site Preparation Sub Total				\$7,820
Earthwork	2300.1	Riprap	38	CY	\$75	\$2,850
	2300.2	3/4" Crushed Stone (clean & washed)	3	CY	\$50	\$150
	2300.3	Non-woven Geotextile Fabric	57	SY	\$8	\$456
		Earthwork and Catch Basin Sub Total				\$3,456
Paving & Surfacing	2500.1	Porous Flexible Paving	12.0	SY	\$125	\$1,500
	2500.1	Reset Cobblestone Edge	35.0	LF	\$35	\$1,225
		Paving & Surfacing Sub Total				\$2,725
Slope Stabilization	2550.1	Coir Fascine w/ Anchors	490	LF	\$30	\$14,700
	2550.2	Double Coir Fascine w/ Anchors	310	LF	\$40	\$12,400
	2550.3	Restore Compacted Soils (scarify and compost)	320	SY	\$30	\$9,600
		Slope Stabilization Sub Total				\$36,700
Site Improvements	2800.1	Plant Establishment Fence (4' height)	940	LF	\$7	\$6,580
	2800.2	Park Fence (4' height)	150	LF	\$40	\$6,000
	2800.3	Educational Signage	2	LS	\$2,000	\$4,000
	2800.4	Helical pile overlook	1	EA	\$15,000	\$15,000
	2800.5	Goose Deterrent Fence	800	LF	\$3	\$2,400
		Site Improvements Sub Total				\$33,980
Planting	2900.1	Planting Soil	20	CY	\$50	\$1,000
	2900.2	Leaf Mulch (2")	6	CY	\$55	\$330
	2900.3	Herbaceous Plant Plugs	1320	EA	\$5	\$6,600
	2900.4	Shrub Tubelings	80	EA	\$25	\$2,000
	2900.5	Live Stakes	120	EA	\$8	\$960
		Planting Sub Total				\$10,890
					Sub Total	\$95,571
					Contingency (15%)	\$14,336
					Project Area Total	\$109,907

Area 2: Scannell Field

Specification Section		Work Item	Quantity	Unit	Unit Cost	Total Cost
Site Preparation	2100.1	Selective Invasive Species Removal	1	PER DAY	\$2,600	\$2,600
	2100.2	Tree Removal	3	EA	\$2,500	\$7,500
	2100.3	Tree Pruning	1	PER DAY	\$1,800	\$1,800
	2100.4	Clean Existing Catch Basin	1	EA	\$500	\$500
	2100.5	Remove and Stockpile Cobblestone Edge	80	LF	\$35	\$2,800
	2100.6	Remove and Dispose of Stabilized Aggregate Path	8	CY	\$30	\$240
	2120.6	Remove and Stockpile Boulders	3	CY	\$75	\$225
		Site Preparation Sub Total				\$15,665
Earthwork	2120.1	Unclassified Excavation	230	CY	\$40	\$9,200
	2120.3	3/4" Crushed Stone (clean & washed)	32	CY	\$50	\$1,600
	2120.4	Pea Gravel (clean & washed)	5	CY	\$55	\$275
	2120.5	Non-woven Geotextile Fabric	46	SY	\$8	\$368
		Earthwork and Catch Basin Sub Total				\$11,443
Paving & Surfacing	2500.1	Porous Flexible Paving	60	SY	\$125	\$7,500
	2500.1	Reset Cobblestone Edge	80	LF	\$35	\$2,800
		Paving & Surfacing Sub Total				\$10,300
Slope Stabilization	2550.1	Coir Fascine w/ Anchors	400	LF	\$30	\$12,000
	2550.2	Double Coir Fascine w/ Anchors	40	LF	\$40	\$1,600
	2550.3	Restore Compacted Soils (scarify and compost)	200	SY	\$30	\$6,000
	2550.4	Erosion Control Blanket	585	SY	\$10	\$5,850
		Slope Stabilization Sub Total				\$25,450
Storm Drainage	2630.1	Underdrains - 6" PVC cleanout	1	EA	\$350	\$350
	2630.2	Underdrains - 6" Perforated PVC w/ Fittings	25	LF	\$40	\$1,000
	2630.3	12" PVC Pipe	30	LF	\$125	\$3,750
	2630.4	24" PVC Drain Basin w/frame & cover or grate	2	EA	\$3,000	\$6,000
		Pipes and Structures Sub Total				\$11,100
Site Improvements	2800.1	Black Vinyl-Coated Chain Link Fence (4' height)	440	LF	\$40	\$17,600
	2800.2	Plant Establishment Fence (4' height)	550	LF	\$7	\$3,850
	2801.1	Educational Signage	1.0	LS	\$2,000	\$2,000
	2801.2	Reset Boulders	8	CY	\$75	\$600
	2802.1	Boulder retaining wall (placed boulders at overlooks)	10	CY	\$200	\$2,000
	2802.2	Helical pile overlook	1	EA	\$18,000	\$18,000
	2803.1	Goose Deterrent Fence	410	LF	\$3	\$1,230
		Site Improvements Sub Total				\$45,280
Planting	2900.01	Planting Soil	20	CY	\$50	\$1,000
	2900.02	Bioretention Basin Soil	34	CY	\$80	\$2,720
	2900.03	Bark Mulch, Biobasin (2")	5	CY	\$55	\$275
	2900.04	Leaf Mulch (2")	40	CY	\$55	\$2,200
	2900.05	Tree 2' Ht. Containers	3	EA	\$40	\$120
	2900.06	Tree Tubelings	18	EA	\$30	\$540
	2900.07	Herbaceous Plant Plugs	3230	EA	\$5	\$16,150
	2900.08	Shrub #1	45	EA	\$20	\$900
	2900.09	Shrub Tubelings	185	EA	\$25	\$4,625
	2900.10	Tall Turf Seed & Tackifier	250	SY	\$5	\$1,250
	2900.11	Lawn Seed & Tackifier	550	SY	\$5	\$2,750
		Planting Sub Total				\$32,530
					Sub Total	\$151,768
					Contingency (15%)	\$22,765
					Project Area Total	\$174,533

Area 3: Boys and Girls Club

Specification Section		Work Item	Quantity	Unit	Unit Cost	Total Cost
Site Preparation	2100.1	Selective Invasive Species Removal	0.5	PER DAY	\$2,600	\$1,300
	2100.2	Tree Pruning	1.0	PER DAY	\$1,800	\$1,800
	2100.3	Remove & Dispose Asphalt	25.00	CY	\$55	\$1,375
		Site Preparation Sub Total				\$4,475
Earthwork	2120.1	Riprap	6	CY	\$75	\$450
	2120.2	Non-woven Geotextile Fabric	21	SY	\$8	\$168
		Earthwork and Catch Basin Sub Total				\$618
Slope Stabilization	2550.1	Coir Fascine w/ Anchors	310	LF	\$30	\$9,300
	2550.2	Restore Compacted Soils (scarify and compost)	95	SY	\$30	\$2,850
	2550.3	Erosion Control Blanket	91	SY	\$10	\$910
		Slope Stabilization Sub Total				\$13,060
Pipe and Structures	2622.1	Flared End Section	1.0	EA	\$1,375	\$1,375
		Pipes and Structures Sub Total				\$1,375
Site Improvements	2800.1	Timber Guardrail	124	LF	\$70	\$8,680
	2800.1	Educational Signage	1	LS	\$2,000	\$2,000
	2800.1	Plant Establishment Fence (4' height)	360	LF	\$7	\$2,520
	2800.1	Goose Deterrent Fence	225	LF	\$3	\$675
		Site Improvements Sub Total				\$13,875
Planting	2954.1	Planting Soil	20	CY	\$50	\$1,000
	2954.2	Tree Tubelings	15	EA	\$30	\$450
	2954.3	Shrub Tubelings	175	EA	\$25	\$4,375
	2954.4	Shrub #1	40	EA	\$20	\$800
	2954.5	Herbaceous Plant Plugs	1950	EA	\$5	\$9,750
	2954.6	Meadow Seed & Tackifier	345	SY	\$5	\$1,725
	2954.7	Tall Turf Seed & Tackifier	160	SY	\$5	\$800
	2954.8	Lawn Seed & Tackifier	70	SY	\$5	\$350
		Planting Sub Total				\$19,250
					Sub Total	\$52,653
					Contingency (15%)	\$7,898

Project Area Total					\$60,551
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Area 4: Spring Valley

Specification Section		Work Item	Quantity	Unit	Unit Cost	Total Cost
Earthwork	2120.1	Unclassified Excavation	80	CY	\$40	\$3,200
	2120.3	3/4" Crushed Stone (clean & washed)	11	CY	\$50	\$550
	2120.4	Pea Gravel (clean & washed)	2.0	CY	\$55	\$110
	2120.5	Non-woven Geotextile Fabric	33.0	SY	\$8	\$264
		Earthwork and Catch Basin Sub Total				\$4,124
Site Improvements	2800.1	Timber Guardrail	16	LF	\$70	\$1,120
		Site Improvements Sub Total				\$1,120
Slope Stabilization	2550.1	Double Coir Fascine w/ Anchors	25.0	LF	\$40	\$1,000
	2550.2	Erosion Control Blanket	265.0	SY	\$10	\$2,650
		Slope Stabilization Sub Total				\$3,650
PVC Pipe	2622.1	Underdrains - 6" Perforated PVC w/ Fittings	20	LF	\$40	\$800
	2622.2	Underdrains - 6" PVC cleanout	1	EA	\$350	\$350
	2622.3	8" PVC Pipe	15	LF	\$120	\$1,800
	2622.4	18" PVC Drain Basin w/frame & grate	1	EA	\$2,750	\$2,750
	2622.5	Large Pipe Connection	1	EA	\$500	\$500
		Pipe Sub Total				\$6,200
Planting	2954.1	Planting Soil	30	CY	\$50	\$1,500
	2954.2	Bioretention Basin Soil	17	CY	\$80	\$1,360
	2954.3	Bark Mulch (2")	2	CY	\$55	\$110
	2954.4	Herbaceous Plant Plugs (2")	850	EA	\$5	\$4,250
	2954.5	Tall Turf Seed & Tackifier	200	SY	\$5	\$1,000
		Planting Sub Total				\$8,220
					Sub Total	\$23,314
					Contingency (15%)	\$3,497
					Project Area Total	\$26,811

Assumptions:

1. All prices included in this estimate are unit costs which include labor and materials.
2. This estimate represents an opinion of probable cost for construction for items under the scope of this project and does not necessarily depict potential unit price discrepancies, variances, or additional services.
3. This estimate assumes the Town will draw down Spy Pond water elevation 1 to 2' for shoreline restoration.
4. This estimate assumes the Town will perform site preparation at Scannell Field, including removal and disposal of existing chain link fence.
5. This estimate assumes the Town will perform site preparation at Spring Valley Street, including sawcut, removal and disposal of pavement and subbase and removal and disposal of guardrail.